

# Viewpoint: A Lesson in Water Management from the Developing World



The King Talal Reservoir (KTR), the largest body of water in Jordan.  
(IDRC Photo: Peter Bennett)

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The United Nations General Assembly proclaimed the year 2003 as the International Year of Freshwater. This is a good opportunity to reflect on this precious resource too often taken for granted by most of us. What lessons can we draw from the fatal mismanagement of the water supply in Walkerton, Ontario? Do we simply centralize the control of drinking water back in provincial hands? Or do we endow local communities with more power over their own water management? There is no simple answer to these questions. But Canadians may learn from the experience of local communities in other parts of the world. This experience shows, among other things, that good local management of water depends on appropriate support and thorough oversight by senior levels of government. And this is precisely what the Ontario government had failed to provide in Walkerton, according to the Report of the Walkerton Inquiry (Part 1) produced by Commissioner Dennis O'Connor.

## **Chosing between two bad alternatives**

When it comes to managing precious fresh water, governments around the world typically choose between two bad alternatives. Some decide they alone should manage water resources. (In developing countries, this centralizing preference has been generally reinforced by big foreign aid donors.) Other governments decide to off-load water management onto local authorities — without investing those authorities with the competence or the money or the support to protect the public interest, and without adequately overseeing their work. This is what happened in Ontario, with the tragic consequences we have seen in Walkerton. <sup>1</sup>

Worldwide evidence demonstrates that neither of these alternatives yields good results. Centralized approaches tend to focus on large-scale, capital-intensive dams and diversions that carry enormous social, environmental, and economic costs and that, more often than not, benefit the rich rather than the poor. On the other hand, poorly prepared municipalities lack the capacity either to protect public health or to conserve an endangered scarce resource, or even to deliver the water as demands grow with population and economic activity.

## **Finding a new way forward**

There is fortunately a better way. Careful research and practical experience, especially in developing countries, show that local water management, properly supported by senior governments and integrated across the watersheds, is commonly more effective and more equitable than those failing alternatives. This is a case — and not the first — when we in the rich North can learn from the poor South.

In most countries, as in most communities, the maximum extraction rates of accessible fresh water have already been approached or surpassed. Indeed, one-third of the world's population already suffers from severe water scarcity — supplies insufficient in quantity, or too polluted in quality. Another third endures moderate but significant scarcity. Even Canadians, imagining ourselves as water-rich, will confront serious challenges of our own as agriculture, industry and urbanization put new pressures on limited water resources — and just when we are learning that much water must be left in place to protect habitat, dilute wastes, stabilize flows, and provide recreation.

## **Managing the demand for water**

All of this will mean that water management at every level — national, regional, local — must shift focus from increasing supply to managing demand. The priority now is not to get more fresh water out of the ground, but to get the most from what we have.

Upper levels of government can promote and finance better demand management, not least by rewarding conservation and penalizing waste. But the actual changes in behaviour must be undertaken in households, on farms, in businesses, and throughout local communities. Recapturing wastewater for profitable reuse, reducing feedlot runoffs, watering lawns less obsessively — local action can yield dramatic improvements.

Hard evidence, gathered both in poor countries and in rich countries, tells us that local approaches that genuinely engage local people in management decisions can be more effective than top-down policy commands. In fact, local people truly in charge of their own resources commonly prove to be reliable stewards of their own environment — and they can be prudent guardians of public health.

## **Fairly sharing water resources**

More than that, traditional forms of water management run by local communities or non-governmental organizations have performed better than central governments at fairly sharing scarce water supplies among all community members.

The worst option, in poor or rich economies, is management by default and neglect. Non regulation sooner or later surrenders scarce fresh water to whatever faction of society can seize control of it — whether as rich landowners, or property developers, or locally powerful industries. Equity always suffers, efficiency usually does, and in many cases the final result is depletion and pollution.

Obviously, municipalities the size of Walkerton — or even Toronto — cannot manage water with total autonomy. Nor should they.

Good water policy consists of planning on the scale of watersheds and river basins, but implementing at the local level. Of course, the relationship between local management and basin-wide or provincial planning cuts both ways. The broader planning needs to be fully informed by

local interests, local potential, and knowledge of local conditions that only local people can bring to bear. At the same time, local supply and demand have to be managed within the physical and economic constraints of the watershed.

### **Creating a new institutional framework**

The trick here — and the political imperative — is to organize this integration of province-wide water strategies with local water management. In developing countries, building this institutional infrastructure is a work in progress. In Ontario, it's more a question of repairing a decade of ill-conceived and clumsily executed institutional dislocation. (Among the most urgent and useful reforms now would be the restoration of the province's badly underfunded watershed-based Conservation Authorities. They were originally created precisely to integrate and reconcile rival claims to water resources.)

The evidence is in. Local water management, rooted in genuinely local participation and backed by strong government support and oversight makes good sense. It can contribute to the protection of public health, and to fair and sustainable development. And it can save us from the deadly mistakes of our own recent past.

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(1) Walkerton: In May and June 2000, many residents of this Ontario, Canada town became ill as a result of E. coli bacteria contamination of the town's water supply. The catastrophe was front page news for many months as hundreds of people were affected: many are still suffering and a few have died. An inquiry was carried out to determine the causes of contamination. For more details, consult: [The Walkerton Inquiry](#)